

DT05 Rec'd PCT/PTG 18 FEB 2005

SUBSTITUTE SPECIFICATION

OK to enter
B14
7/10/06

TITLE OF THE INVENTION

CONFIGURATION FOR DIGITAL-ANALOG CONVERSION OF HIGH-FREQUENCY DIGITAL
INPUT SIGNAL INTO CARRIER-FREQUENCY ANALOG OUTPUT SIGNAL

CROSS REFERENCE TO RELATED APPLICATIONS

[0001] This application is based on and hereby claims priority to German Application No. 102 27 856.8 filed on 19 August 2002 and European Application No. 02018602.9 filed on 19 August 2002, the contents of which are hereby incorporated by reference.

BACKGROUND OF THE INVENTION

1. Field of the Invention

[0002] The invention relates to a configuration for the digital-analog conversion of a high-frequency digital input signal into a carrier-frequency analog output signal.

2. Description of the Related Art

[0003] Architectures for the generation of a broadband, carrier-frequency output signal are known in which, in a low frequency range, a digital input signal is converted into an analog signal using a digital-analog converter, and then reconverted into the carrier-frequency output signal using one or more mixing stages.

[0004] Furthermore, digital-analog converter architectures are known in which a carrier-frequency output signal is generated from a high-frequency digital input signal without further frequency conversion. The carrier-frequency analog output signal in this case also has unwanted carrier frequencies in addition to a desired carrier frequency. These unwanted carrier frequencies can be caused, for example, by a less than perfect digital input signal or by various unwanted modulation mechanisms.

[0005] In the described architectures, cost-intensive filters with high quality or mixers with high linearity, which are always configured on the output end and which must be adjusted to a required carrier frequency range in each case, are necessary. These must be replaced, at great expense, if a change in carrier frequency range is required.